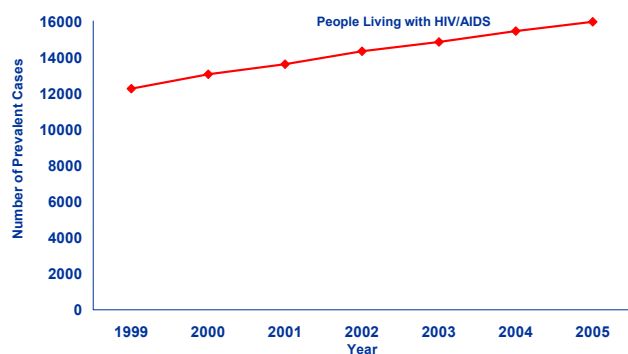




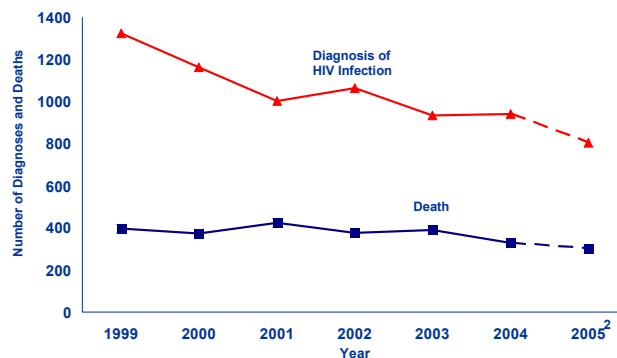
### HIV/AIDS Trends from 1999 to 2005

Figure 1. Trends in HIV/AIDS Prevalence by Year: Massachusetts, 1999-2005



Data Source: MDPH HIV/AIDS Surveillance Program; Data as of 7/1/06

Figure 2. Trends in HIV Infection<sup>1</sup> and Death among People Reported with HIV/AIDS by Year: Massachusetts, 1999-2005<sup>2</sup>



<sup>1</sup> Reflects year of diagnosis for HIV infection among all individuals reported with HIV infection, with or without an AIDS diagnosis.

<sup>2</sup> 2005 Data are preliminary

Data Source: MDPH HIV/AIDS Surveillance Program; Data as of 7/1/06

Every year, there are more people living with HIV/AIDS in Massachusetts. In the past seven years, the number of people living with HIV/AIDS has increased as new HIV infection diagnoses – while declining consistently – exceeded the number of deaths among people reported with HIV/AIDS each year. From 1999 to 2005, the number of people living with HIV/AIDS increased by 30%.

### General Statistics

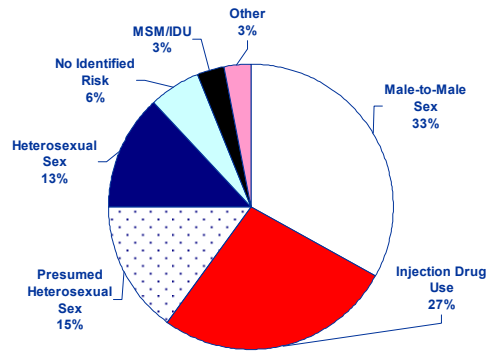
- As of December 31, 2005, a cumulative total of 27,631 Massachusetts residents have been diagnosed and reported with HIV infection, with or without an AIDS diagnosis.
  - 42% (N=11,665) have died and 58% (N=15,966) are living with HIV/AIDS.
  - As of December 31, 2005<sup>1</sup>, there were 15,966 people known to be living with HIV/AIDS in Massachusetts.
- Including estimates of Massachusetts residents infected with HIV who do not yet know their status or who have not been reported, there are 24,000 – 26,000 individuals currently living with HIV/AIDS in the Commonwealth.
  - An estimated one-quarter do not know their status.

### Who is currently living with HIV/AIDS?

- Forty-five percent of people living with HIV/AIDS in Massachusetts are white (non-Hispanic), 28% are black (non-Hispanic), 25% are Hispanic, 1% are Asian or Pacific Islander, and less than 1% are American Indian or Alaska Native. In sharp contrast, black (non-Hispanic) and Hispanic individuals each make up 6% of the Massachusetts population.
- Male-to-male sex and injection drug use are the leading reported risks for HIV infection among people living with HIV/AIDS, accounting for 33% and 27% of all infections, respectively.

<sup>1</sup> Please note that previous editions of the Epidemiologic Profile presented people living with HIV/AIDS as of July 1<sup>st</sup> whereas this edition presents people living with HIV/AIDS as of December 31<sup>st</sup> for consistency with national conventions. The number of people living with HIV/AIDS on December 31<sup>st</sup> is typically greater than on July 1<sup>st</sup> of the same year.

**Figure 3. People Living with HIV/AIDS on December 31, 2005  
by Exposure Mode: Massachusetts**



Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 7/1/06

- Among **males** living with HIV/AIDS, 52% are white (non-Hispanic), 23% are black (non-Hispanic) and 23% are Hispanic.
- Among **females** living with HIV/AIDS, 29% are white (non-Hispanic) 40% are black (non-Hispanic) and 28% are Hispanic.

### Who is experiencing differential impact from HIV/AIDS?

- At age-adjusted prevalence of HIV/AIDS of 1,427 and 1,217 cases per 100,000 population, black (non-Hispanic) and Hispanic individuals are impacted at levels 11 and 9 times that of white (non-Hispanic) individuals (129 per 100,000).
- At age-adjusted prevalence of HIV/AIDS of 1,816 and 1,757 cases per 100,000 population, black (non-Hispanic) and Hispanic **males** are each impacted at levels 8 times that of white (non-Hispanic) **males** (215 per 100,000).
- At age-adjusted prevalence of HIV/AIDS of 1,094 and 743 cases per 100,000 population, black (non-Hispanic) and Hispanic **females** are impacted at levels 23 and 15 times that of white (non-Hispanic) **females** (48 per 100,000).

### Who is most at risk of HIV infection?

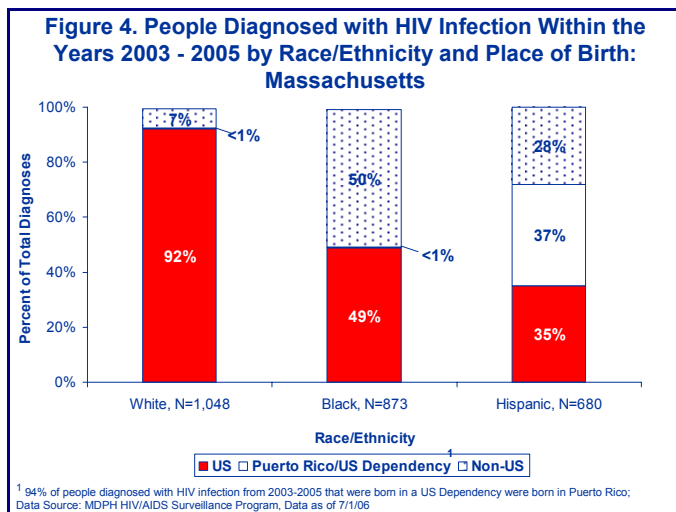
Trends in the distribution of HIV infection diagnoses from 1999 to 2005 are used to highlight populations at elevated risk of HIV infection. These trends, as well as the distribution of people who were recently diagnosed with HIV infection within the three-year period 2003 to 2005, provide useful information for planning and targeting HIV prevention programs.

- Of all people diagnosed with HIV/AIDS and reported in Massachusetts, 20,379 were diagnosed with HIV infection before 1999, 1,325 were diagnosed with HIV infection in 1999, 1,164 in 2000, 1,003 in 2001, 1,064 in 2002, 933 in 2003, and 943 in 2004. As of July 1, 2006, 806 HIV diagnoses were reported for 2005. This number will continue to increase as additional cases are reported throughout the rest of the year, likely resulting in a maintained plateau in the number of HIV diagnoses over the past three years. A similar number (N=840) of cases had been reported for 2004 at this time last year.
- From 1999 to 2004, the distribution of people diagnosed with HIV infection by gender was 68% to 70% male and 30% to 32% female. In 2005, males accounted for a larger (74%) and females a smaller (26%) proportion of HIV diagnoses than in earlier years.
- From 1999 to 2005, the proportion of HIV diagnoses that were among white (non-Hispanic) individuals ranged from 38% to 42%, black (non-Hispanic) individuals from 30% to 34% and Hispanic individuals from 23% to 27% in each of these years.
- Among **females** diagnosed with HIV infection from 1999 to 2005, the proportion of black (non-Hispanic) females increased from 40% to 55%, while the proportion of white (non-Hispanic) females decreased from 30% to 16%; the proportion of Hispanic females ranged from 27% to 31%.
- In 2005, injection drug use accounted for a smaller proportion (14%) of all HIV diagnoses than in earlier years.

For detailed data tables and technical notes see Appendix

Massachusetts Department of Public Health HIV/AIDS Bureau 250 Washington St. 3<sup>rd</sup> Floor Boston, MA 02108  
617.624.5300 FAX 617.624.5399 <http://www.mass.gov/dph/aids/hiv aids.htm>

- Among **males** diagnosed with HIV infection, the proportion of HIV diagnoses with male-to-male sex as the primary reported exposure mode increased from 41% in 1999 to 53% in 2005.
- From 1999 to 2005, the proportion of HIV diagnoses among **females** exposed to HIV through heterosexual sex with partners of unknown risk and HIV status (presumed heterosexual sex) increased from 32% to 45%.
- From 1999 to 2005, the proportion of people born outside the U.S. among those with HIV infection increased from 18% to 30%.
- During the same time period the proportion of **females** diagnosed with HIV infection and born outside the US or its dependencies increased from 28% to 50%.
- Fifty percent of black (non-Hispanic) individuals diagnosed with HIV infection within the three year period 2003 to 2005 were born outside the US compared to 28% of Hispanic and 7% of white (non-Hispanic) individuals.



## Who is infected with HIV but does not yet know?

People who already have AIDS when HIV infection is diagnosed (or who are diagnosed with AIDS within 2 months of HIV infection diagnosis) represent a population that may have first learned about their HIV status late in the progression of HIV disease. It is likely that people who are diagnosed with both HIV infection and AIDS within two months have been infected for more time prior to learning

their HIV status than people who learn their status earlier in the course of infection.

- From 2003 to 2005, 752 people already had AIDS when HIV infection was diagnosed (or were diagnosed within 2 months), representing 28% of the 2,682 diagnoses of HIV infection during this time period.
- Thirty-six percent of people born outside the US who were diagnosed with HIV infection from 2003 to 2005 already had AIDS when they were diagnosed (or were diagnosed within 2 months), compared to 25% of people born in the US and 26% of people born in Puerto Rico and other US dependencies.

## How have patterns of AIDS diagnoses changed over time?

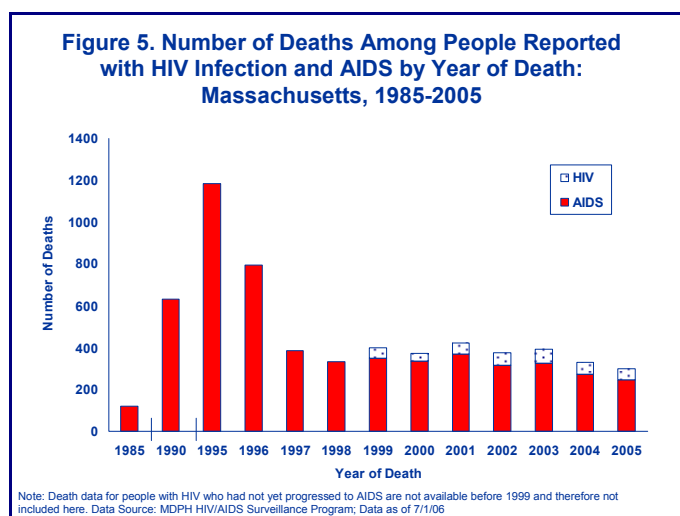
- After reaching a plateau of incidence at around 900 new diagnoses each year from 1997 to 1999, reported AIDS incidence appears to have declined from 2000 to 2005.
- From 1996 to 2005, the proportion of newly diagnosed AIDS cases among black (non-Hispanic) individuals increased from 26% to 35% and the proportion among white (non-Hispanic) individuals decreased from 50% to 39%. During the same time period, the proportion of AIDS cases among Hispanic individuals ranged from 24% to 28%.
- For 12 years, from 1992 through 2003, the number of new AIDS diagnoses with injection drug use as the reported exposure mode surpassed the number of AIDS diagnoses with male-to-male sex as the reported exposure mode. In 2004, the number of AIDS diagnoses with male-to-male sex as the reported exposure mode (N=146) exceeded that with injection drug use (N=143) by 3. In 2005, the number of AIDS diagnoses with male-to-male sex as the reported exposure mode exceeded that with injection drug use by 33 (143 vs. 110).

For detailed data tables and technical notes see Appendix

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## Who is dying with HIV/AIDS and how has this changed over time?

- After reaching a peak of 1,212 in 1994 (data not shown), deaths among people reported with AIDS declined each year until 1998, when there were 332 deaths. (Deaths in people reported with HIV infection [non-AIDS]\* are not available prior to 1999 because HIV infection was not a reportable condition before that time.)



- From 1999 to 2005, the proportionate distribution of deaths among people reported with HIV/AIDS by race/ethnicity fluctuated without a clear trend. The proportion of deaths among white (non-Hispanic) individuals during this time period ranged from 47% to 54%, black (non-Hispanic) from 22% to 30% and Hispanic from 18% to 27%.
- From 1999 to 2005, the distribution of deaths among people reported with HIV/AIDS by exposure mode remained fairly stable, with over 50% of deaths each year in people with a primary reported risk of injection drug use and 15% to 22% in people with a risk of male-to-male sex.
- From 1999 to 2005, the proportion of deaths among people reported with HIV/AIDS with a primary reported risk of heterosexual sex (with partners with known risk and HIV status) ranged from 7% to 12%, of presumed exposure through heterosexual sex from 6% to 8%, of male-to-male sex and injection drug use from 4% to 6%, and of other risks 1% to 4%.

Data Source: Massachusetts Department of Public Health HIV/AIDS Surveillance Program, Data as of 7/1/06

- From 1999 to 2005, the annual number of deaths of people reported with HIV (non-AIDS)\* and AIDS ranged from 300 to 423.
- The proportion of deaths among people with HIV (non-AIDS)\* of total deaths among people reported with HIV/AIDS increased from 12% in 1999 to 18% in 2005.
- The proportion of deaths among people reported with HIV/AIDS who were female increased from 24% in 1999 to 31% in 2005.

\* People with HIV infection (non-AIDS) refers to those who were reported with an HIV infection diagnosis and did not progress to AIDS before death.

For detailed data tables and technical notes see Appendix

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